



Joellash

Acting Infrastructure Operations Associate Labs Director & Chief Security Officer

As the acting Infrastructure Operations Associate Labs Director and Chief Security Officer for Sandia National Laboratories, Joel Lash provides leadership to effectively and efficiently manage infrastructure operations, including safeguards and security, environmental restoration and waste management, laboratory facilities and construction, and emergency management.

In his previous role, Joel led Sandia's Engineering Sciences Center, which stewards a breadth of science disciplines that spans research, development and application, with fundamental discovery and advanced diagnostics applied to highly integrated full scale physical and computational simulation of engineered systems subjected to extreme environments.

Joel joined Sandia's Pulsed Power Sciences Center in May 1996 to develop and field advanced plasma diagnostics for the Ion Beam Fusion Program and for Sandia's development of high-intensity radiographic x-ray sources. In 1998, he became part of the High Energy Density Physics program, where he developed ignition and high-yield Inertial Confinement Fusion target designs using Z-pinch pulsed power drivers.

In 2000, Joel joined the Engineering Sciences Center and led both componentand system-level computational mechanics analysis supporting the multiple product development applications. He was promoted to multiphase transport processes manager in 2004 and thermal, fluid and aero sciences in 2009. In this role, he also led the physics and engineering models program within NNSA's Advanced Strategic Computing Program and led Sandia's predictive simulation Laboratory Directed Research and Development investment area.

In 2013, Joel became senior manager of Z facility research and development, where he was responsible for the operation and engineering of the Z machine, the world's most powerful pulsed power facility. He was also responsible for Z diagnostic research, development and fielding.

Joel earned his bachelor's degree in mathematics with emphasis in physics and computer science from Indiana University and his master's and PhD in nuclear science from the University of Michigan. As a National Science Foundation Graduate Fellow, he developed optical plasma diagnostics for studying the interaction of high-intensity lasers and electron beams with metals and ceramics. Joel is a member of the American Physical Society.

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